

Appln. No. Serial No. 10/805,822

Amdt. Dated January 31, 2006

First Response in Appln, Reply to Office Action of 10/20/2005

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### REMARKS

The Examiner rejected Claims 14-19 under 35 U.S.C. § 103 as being unpatenable over JP 55022875 in view of JP 56060049. The foregoing amendment amends independent Claim 14 to clarify the impurity concentration of the claimed invention and amends Claims 14, 15, 18 and 19 to correct some minor errors. Claim 14 requires that the impurity concentration of the graded base region decreases gradually along a lateral direction from the first main electrode region to the second main electrode region. This aspect of the invention is described at least by Figure 4 and the accompanying text on page 10. The claimed lateral doping profile requires a gradual decrease of the impurity concentration. In contrast, the lateral doping profile of Figure 2(b) of JP 55022875 describes a doping profile that increases and decreases. Thus, JP 55022875 does not describe a gradually decreasing doping profile from the first main electrode region to the second main electrode region, as required by Claim 14. Claims 15-19 depend from Claim 14 and thus are distinguishable from JP 55022875 for the same reasons as Claim 14.

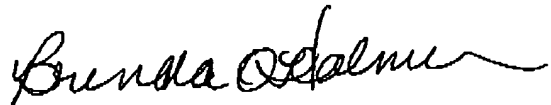
### CONCLUSION

The foregoing is submitted as a complete response to the Office Action identified above. This application should now be in condition for allowance, and the Applicants solicit a notice to that effect. If there are any issues that can be addressed via telephone, the Examiner is asked to contact the undersigned at 404.685.6799.

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No fee is believed to be due. If a fee is due, the Commissioner is authorized to charge such fee and any additional fees that may be due or credit any overpayment to Deposit Account No. 11-0855.

Respectfully submitted,



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